

**Lactate Dehydrogenase as a  
Novel Target and Reagent for Diabetes Therapy**

**Abstract**

5           The present invention provides an isolated nucleic acid encoding a  
novel lactate dehydrogenase (LDH) as well as the isolated LDH polypeptide.  
Also provided are methods of enhancing fuel-stimulated insulin secretion, in  
particular, glucose-stimulated insulin secretion. Further provided are methods  
of screening for compounds that bind LDH, modulate LDH activity, and/or  
10   modulate fuel- or glucose-stimulated insulin secretion and the compounds  
identified thereby. The invention further provides a method of enhancing  
insulin secretion by administering a nucleic acid encoding LDH to a subject in  
a therapeutically effective amount.

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